

## **Integration of 1.5m Telescope and ranging system in CRL**

*Hiroo Kunimori*

*Communications Research Laboratory, 4-2-1 Nukui-kita Koganei, Tokyo 184-8795, JAPAN. Voice: +81 42-327-7559; Fax: +81 42-327-6699; Email: kuni@crl.go.jp.*

*Futaba Katuso*

*Communications Research Laboratory, 4-2-1 Nukui-kita Koganei, Tokyo 184-8795, JAPAN.*

*John Guilfoyle, Vernacular Pty Limited.*

*Takuma Satoh, JAMCO Corp.*

### **ABSTRACT**

The Keystone stations (Miura and Tateyama) were dismantled and the 75cm telescopes were transferred to other institute in Japan. Laser and electronics were moved and integrated to Koganei (CRLAS) 1.5m telescope as basis of conventional SLR system but without routine operation. We switch lasers between 50mJ/50ps 20Hz (high precision) and 200mJ/3ns/ 10Hz (high power) for requirement of various targets acquisition such as LRE or ADEOS-II. Multiple tracking cameras are used in different FOV (0.5arcdeg/2arcmin/50arcsec) and sensitivity (Mag.9-13). In addition to the conventional SLR system, we plan a next generation of laser ranging collaborated with optical communication by integrating CW laser with Pseudo-noise modulation and wideband correlator.